

Jacky Lee

✉ grenmester@gmail.com | 🏠 grenmester.com | 📷 grenmester | 🌐 grenmester

Education

Harvey Mudd College

Claremont, CA

B.S., JOINT MAJOR IN COMPUTER SCIENCE AND MATHEMATICS | TOTAL GPA 3.93 | MAJOR GPA 4.00

Dec 2019

- **CS:** Deep Learning, Advanced Topics in Algorithms, Big Data Analytics, Data Structures and Program Development, Programming Languages, Computability and Logic
- **Math:** Differential Topology, Measure Theory, Advanced Linear Algebra, Representation Theory, Galois Theory, Intermediate Probability, Multivariable Calculus, Combinatorics

Hong Kong University of Science and Technology

Clear Water Bay, HK

STUDY ABROAD, COMPUTER SCIENCE AND ENGINEERING

Fall 2019

For a more complete list of courses, visit <https://www.grenmester.com/about/coursework.pdf>.

Research Experience

UCLA Computational and Applied Mathematics REU

Los Angeles, CA

RESEARCH INTERN WORKING ON CRIME MODELING

Jun 2019 - Aug 2019

- Worked with 4 other student researchers to identify patterns from Los Angeles homicide data
- Developed zonal optical character recognition pipeline for text extraction from old documents using OpenCV
- Performed topic modeling and prediction using a modified latent Dirichlet allocation model built using PyTorch
- Presented work at the 2019 Joint ATD+AMPS Annual Workshop

Harvey Mudd Clinic Program, EDR

Claremont, CA

PROJECT MANAGER WORKING ON OPTICAL CHARACTER RECOGNITION

Sep 2018 - May 2019

- Led 4 other students as the spring project manager to develop image processing and feature extraction software
- Built custom rotation-invariant CNN model with PyTorch to extract and recognize handwritten characters

Internship Experience

Facebook

Menlo Park, CA

SOFTWARE ENGINEER INTERN WORKING ON VIDEO PROCESSING

May 2018 - Aug 2018

- Applied AR/VR effects on videos by processing frames sequentially using C++
- Created an intuitive UI using React and PHP/Hack for applying AR/VR effects

BMC Software

Santa Clara, CA

COMPUTER SCIENCE INTERN WORKING ON INNOVATION SUITE

Dec 2016 - Jan 2017

- Debugged software for businesses to easily create digital management apps with a drag-and-drop interface
- Collaborated with 7 interns to develop 2 applications using Innovation Suite with Java, Maven, and AngularJS

For a list of projects, visit <https://www.grenmester.com/about/projects/>.

Teaching Experience

Academic Excellence (AE) Tutor

Claremont, CA

HARVEY MUDD COLLEGE

Sep 2018 - May 2019

- Tutored in a team of 12 math AE tutors for 6 math core courses and 3 math elective courses
- Tutored in a team of 7 chemistry AE tutors for 2 chemistry core courses

Teaching Assistant

Claremont, CA

HARVEY MUDD COLLEGE

Sep 2018 - Dec 2018

- Assisted with classroom lectures for an Abstract Algebra I class of ~20 students

Individual Private Tutor

HARVEY MUDD COLLEGE

- [Spring 2018] Discrete Mathematics
- [Spring 2018] Chemistry in the Modern World II
- [Spring 2018] Introduction to Biology
- [Fall 2017] Multivariable Calculus
- [Fall 2017] Chemistry in the Modern World I

Claremont, CA
Sep 2017 - May 2018

Course Tutor

HARVEY MUDD COLLEGE

- [Spring 2018] Held tutoring hours for Computability and Logic, ~80 students
- [Fall 2017] Held tutoring hours for Abstract Algebra I, ~35 students

Claremont, CA
Aug 2017 - Apr 2018

Course Grader

HARVEY MUDD COLLEGE, POMONA COLLEGE

- [Fall 2019] Advanced Topics in Algorithms, ~35 students
- [Spring 2019] Advanced Linear Algebra, ~30 students
- [Spring 2018] Computability and Logic, ~80 students
- [Fall 2017] Abstract Algebra I, ~35 students
- [Spring 2017] Discrete Mathematics, ~90 students

Claremont, CA
Jan 2017 - Current

Math Tutor

IVY ACADEMICS

- Instructed 2 high school students in AP Calculus and AP Statistics
- Instructed 3 high school students in SAT math
- Instructed 2 elementary school students in competition math

Millbrae, CA
Jun 2015 - Jun 2016, Jun 2017 - Aug 2017

Redwood Middle School Math Club Coach

SARATOGA MATH CLUB

- Coached ~30 middle school students with 3 other coaches in competition math

Saratoga, CA
Sep 2015 - Jan 2016

Leadership

- Aug 2018 - Nov 2019 **Caltech Harvey Mudd Math Competition**, Lead Organizer
- Sep 2018 - May 2019 **HMC Math Club**, President
- Sep 2018 - May 2019 **HMC Algorithms Club**, Officer
- Sep 2018 - May 2019 **5C Badminton Club**, President

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Extracurriculars

- Dec 2018 **Putnam Math Competition**, Top 500
- Nov 2018 **International Collegiate Programming Contest, SoCal Regional**, 8th Place
- Dec 2017 **Putnam Math Competition**, Top 500
- Nov 2017 **Caltech Harvey Mudd Math Competition**, Grader
- Nov 2017 **International Collegiate Programming Contest, SoCal Regional**, 19th Place
- Nov 2016 **Caltech Harvey Mudd Math Competition**, Grader
- Sep 2016 **HMC Biennial Conference for Sustainable Design and Solutions**, Volunteer

Claremont, CA
Riverside, CA
Claremont, CA
Claremont, CA
Riverside, CA
Pasadena, CA
Pasadena, CA

For more extracurriculars, visit <https://www.grenmester.com/about/about-me/>.

Skills

- Programming Languages** Python, C++, Java, Javascript, PHP, Haskell
- Other Skills** Git, Bash/Zsh, LaTeX, Jupyter Notebook, Flask, Node, React, Neovim, Emacs, Tmux
- Languages** Cantonese (bilingual), Mandarin (conversational), Spanish (conversational), Japanese (elementary)